ART. XV.—*Case of Primary Excision of the Ankle-joint.* Reported by H. G. LANDIS, A.M., M.D., of Niles, Ohio.

G. H., æt. 15, on the 28th of July, 1873, fell off a mowing-machine while in motion. The knives struck the left ankle from without, cutting off the external malleolus, shaving a thin segment from the top of the astragalus and completely exposing the joint, leaving the foot attached to the leg by a thin flap over the internal malleolus, three inches in breadth, but in which the posterior tibial vessels and nerves lay uninjured. The foot could be doubled over on the leg, and when the boy was first seen in the harvest field, he was standing on the head of the tibia with the foot to one side. I saw him in consultation with his family physician, Dr. A. G. Miner, two hours after the injury, when he was in the following condition: There was no perceptible shock; pulse full and regular; very little pain, and the hemorrhage had ceased, having been very slight throughout. The foot was warm and the recurrent circulation completely re-established, even in the central portion of the detached member. It seemed, therefore, entirely practicable to save the foot. After the patient had been anæsthetized, Dr. Miner sawed off the articulating surface of the tibia and the projecting portion of the internal malleolus; enough of the astragalus was also removed to insure neat apposition. The foot was then replaced and the skin brought together by silk sutures. Both ends of the anterior tibial were tied (the distal end giving as large a jet as the proximal), and also the peroneal artery. The wound was then completely covered with freshly-scraped lint, a straight splint applied as a temporary expedient, and a roller bandage. He was then placed on his back in bed, with the foot, fully everted, on a small pillow. Anodynes to be given if required, and cold water to be applied if the foot became hot. At the risk of becoming tedious, I desire to give the after-history, in detail in the hope that the elements of success may be apparent.

July 29. Condition good; pulse 96; slept well after 2 A.M.; no hemorrhage, and the lint has become an hermetical seal. A fever mixture of spirits nitre and aconite was prescribed, and small doses of morphia every three hours, to which was added quinia. The latter was given more for local reasons, the neighbourhood being malarious, than for any therapeutic indication. A one per cent. solution of carbolic acid was directed to be constantly applied.

30*th*. Comfortable; pulse 100; temperature 100°; temperature of external side of foot, as nearly as could be ascertained, $98\frac{1}{2}°$. He has complete sensation throughout the whole foot. As his position was uncomfortable we had provided a light box made of tin, with a high footpiece, and a portion of the outside strip removed to allow of dressing the wound. The limb was carefully placed in this, supported by cotton batting and steadied by small bran bags, and the box swung to a staple in the ceiling. The lint on the cut was not disturbed, and the carbol dressing continued, as also the quinia and morphia. The tongue was heavily coated, there having been no movement of the bowels since the 27th, for which blue mass was given, to be followed by oleum ricini.

31*st*. Bowels moved once; much pain in foot during night; pulse 90; temperature 99°; foot of natural warmth; removed lint from lower part of wound; found about an inch apparently healing by first intention;

added to treatment quinia and tinct. ferri chlorid.; morphiæ sulphas and bromide of potassium to be given *pro re nata.*

Aug. 1. Pulse 90; temperature 99½°; removed lint and dressed with adhesive strips; some swelling which increased through the day, and by 6 P.M. he was suffering considerable pain, the temperature had risen to 100¾° and pulse to 100; bowels still sluggish; repeated laxative and gave spts. ætheris nitros. through the night.

2d. Seen with Dr. A. J. Leitch; feels somewhat better; swelling not increased; pulse 100; temperature 100¾°.

3d. Had a good night; pulse 94; temperature 99½°; foot looks well; took it out of box to dress it and replaced it; removed two stitches, which liberated a little bloody pus; we suspect him of masturbation, even in our presence; the pulse was only 90 after the dressing, and the tongue clearing off; sent for again in the evening at 8 o'clock; is reported to have had several slight spasms; pulse 120, but temperature 100¾°; gave potass. bromidi gr. x, camphoræ et opii, āā gr. ss.

4th. Called in the advice of Dr. D. B. Woods, of Warren, who considered his condition favourable; pulse 88; temperature 99°; slight discharge of healthy pus from the wound; swelling diminished. From this time Dr. Miner took exclusive charge of the case, and to his kindness I am indebted for the remaining notes.

6th. Pulse 90; temperature 99½°; feels well; very little swelling or suppuration.

8th. After a Seidlitz powder he passed a number of large lumbricoid worms.

9th. Temperature 99°; administered santonin, which caused a further exodus of lumbricoids; from this date he improved steadily; the foot was disturbed as little as possible, and the carbol dressing steadily applied.

27th. Thirty-first day after injury; the cut is entirely healed except the points of exit of the ligature; that of the peroneal artery was removed today; the others are firm.

28th. The ligature on the distal end of the anterior tibial came away after slight traction; that on the proximal end was not detached until Sept. 8th, the forty-third day; it had not been deemed advisable to change the position of the leg until the ligatures had become detached, and for a short time a small slough on the heel had existed, which was relieved by first removing pressure by cutting a trap in the box, and afterwards dressing with carbolated oxide of zinc ointment; on Sept. 10th an albumen bandage was applied; on the next day this was opened by a longitudinal incision in front, padded with cotton, and the patient allowed to move about; by Sept. 30 he could bear some weight on it, with every prospect of a serviceable foot. Although the ankle-joint is obliterated by anchylosis, the removal of part of the astragalus so changes the relative position of the astragalo-cuboid articulation as to lead to the hope that it may serve as a partial substitute. The cartilage of the epiphysis was not interfered with, so that the growth in length of the leg will not be materially disturbed.

I am inclined to think that one very important element of the treatment was the unremitting use of a solution of carbolic acid. During the whole time the foot looked well. The swelling was slight at any time. There was no violent inflammation. Except from the habits of the patient and incidental circumstances, there was no cause for alarm at any time. Contrasting this with the fact that excision of the ankle-joint is by no means regarded with universal favour, it may prove instructive to study carefully an eminently successful case, and endeavour to learn why it is not applicable to all injuries of a like character.

ART. XVI.—*Exophthalmic Goitre successfully treated by the Iodo-bromide of Calcium.* By C. H. GUPTILL, M.D., of Eliot, Maine.

SEPT. 22, 1872, was called to visit Mary G., unmarried, æt. 45, who had been under the care of a respectable physician for one year, and had been treated for anæmia and nervous troubles regarded as the result of long confinement as a seamstress. She received no benefit from the treatment, chiefly tonic. I found her much emaciated; very excitable; bowels constipated; appetite poor; urine scanty and high coloured; pulse very rapid and small, often could not be counted; heart's action felt over a large area; breathing laboured, and muscles of neck enlarged, tending to rigidity; veins of face and neck congested; the thyroid gland was much enlarged, and this first alarmed the family. She had intolerable headaches; the expression of the face was that peculiar to exophthalmic goitre; the eyeballs very prominent, giving a wild stare and a larger look to the eye than natural. I had seen in thirty years of practice only one similar case. I prescribed Trousseau's treatment, viz., digitalis, which after a fair trial proved ineffectual; gelseminum and Fowler's solution were then successively used, but without benefit; anodynes for the headaches only aggravated the conditions present; nervines were useless in their turn; stimulants made matters worse. About three months and a half after taking charge of this case, new features appeared. Induration presented itself of the abdominal muscles, also of the thighs and legs. At this time I was led to prescribe the iodo-bromide of calcium in the form of solution—one half a teaspoonful in water morn, noon, and eve. The indurated portions were also bathed with the same. Under this treatment my patient at once improved. The heart's action became more quiet. The nervous excitement calmed, the appetite returned, the patient gained strength. Soon she was able to leave her bed. The thyroid gland lessened in size, and in six months became natural. Soon my constant services were not required, and my visits became occasional only. Miss G. is now in very good health. I have, however, to say that she is not able to do without this medicine. If she omits its use for some weeks her symptoms return. She becomes excitable, and resorts to the remedy, always with success.

I regard the iodo-bromide of calcium as a very valuable addition to our therapeutical list. It is a decided sedative, as I have seen in other nervous cases. It is an efficient alterative, and is well calculated to meet many conditions where a sedative, alterative, and tonic treatment is required. The effect is very satisfactory where nervous irritability and debility are conjoined with a peculiar cachexia, as seen, for instance, in exophthalmic goitre.